Professor Frazer reported the analysis of the metal referred to him at a former meeting (5th April), as made by his assistant, Mr. Mucklé, with the following result:

Copper, - - -	81.
Silver, - - -	15.87
Iron, - - -	.39
Antimony, - - -	.94
Arsenic, a trace.	
	98.20

Pending nominations were read.

Stated Meeting, May 17.

Present, eleven members.

Dr. Franklin Bache, Vice-President, in the Chair.

The following donations were announced:—

FOR THE LIBRARY.

Memorie della Reale Academia della Scienza di Torino. Serie Seconda. Tomes V. VI. VII. VIII. IX. X. 1843, 1849. Torino. 4to.—*From the Royal Academy of Sciences at Turin.*

Annual Report of the President of the Maryland Historical Society, and of its Committee on the Gallery of the Fine Arts. Baltimore, 1850. 8vo.—*From the Maryland Historical Society.*

Transactions of the American Medical Association. Instituted 1847. Philadelphia, 1849. 8vo.—*From the Association.*

The African Repository and Colonial Journal. Vol. XXVI. No. 5. May, 1850. Washington. 8vo.—*From the American Colonization Society.*

Journal of the Franklin Institute. Third Series. Vol. XIX. No. 5. May, 1850. Philadelphia. 8vo.—*From the Institute.*

Report of the Select Committee of the Legislature of 1849, on the Publication of the Natural History of the State of New York. Made to the Legislature, January 2, 1850. Albany. 8vo.—*From the Regents of the University of the State of New York.*

Third Annual Report of the Regents of the University of the State of New York, on the Condition of the State Cabinet of Natural History, and the Historical and Antiquarian Collection annexed thereto. Made to the Senate, January 11, 1850. Albany. 8vo.—*From the same.*

Annali di Fisica dell Abbate Francesco Cav. Zantedeschi, Professore di Fisica, &c. Fascicolo IV. Padova, 1849–50. 8vo.—*From Prof. Zantedeschi.*

American Journal of Science and Arts. Second Series. No. 27. May, 1850. New Haven. 8vo.—*From the Editors, Profs. Silliman and Dana.*

Report to the Smithsonian Institution on the History of the Discovery of Neptune. By Benjamin Apthorp Gould, Jr. Washington, 1850. 8vo.—*From the Author.*

Collection of the Laws of Patent Privileges of all the Countries of Europe, the United States of North America, and the Dutch West Indies. Published by Charles F. Loosey, Civil Engineer, &c. in Vienna. 1849. 8vo.—*From the Publisher.*

Washington's Farewell Address to the People of the United States of America. New York, 1850. 4to.—*From James Lenox, Esq. of New York.*

Professor Tucker read a paper on the probable effects of the gold mines of California, deduced from the depreciation of the precious metals caused by the discovery of America.

Of the history of their depreciation our knowledge is not indeed either precise or quite authentic, but enough is known to lead us to conclusions that approach the truth.

Professor T. stated, that in 1492, when America was discovered, the quantity of gold and silver in Europe has been commonly estimated at about 300 millions of dollars. According to Baron Humboldt, whose authority is most to be relied on, the accession from the American mines was, in one century (the 16th), 605 millions; in the 17th century the whole amount was 2342 millions; and in little more than another century (to 1803) it reached 5337 millions. If we add to this the amount imported from Africa, the amounts drawn from the mines of Europe and Siberia, and from the American mines since 1803, the total will be 8063 millions. Deducting from this amount what has been sent to India and China, what has been lost, consumed by wear or in manufactures, and there would remain 4663 millions for the whole amount in Europe and America, of which about one-third in value and one forty-sixth in quantity was supposed to be gold.

In 1775, Adam Smith attempted to ascertain the depreciation of the precious metals from a comparison of the average prices of wheat in England at different periods, and he inferred that there was no very sensible depreciation before 1570; but from this period to about 1640, that gold had depreciated to a third, and silver to a fourth of its former value; and that there either had been no subsequent depreciation to his time, or that *silver* had somewhat risen in value.

If these views of Dr. Smith be correct, we ought not to expect any depreciation of both the metals until the quantity now in Europe shall have received an accession of 54 per cent. which, amounting to 2528 millions, would require a net annual addition of 50 millions for 50 years, or of 100 millions for 25 years. And as the amount now in Europe and America is about fifteen times its amount before the discovery of America, we should not experience the same depreciation as was produced by that discovery, until the quantity now in existence had, in like manner, received a fifteen fold increase, that is, had reached the incredible sum of 70,000 millions.

It indeed appears highly probable, from various facts, that Smith has underrated the depreciation in the first 70 years before 1560, and overated it in the 70 years succeeding. Yet, after making ample allowance for these errors, the result will not be materially different.

There seems then to be no ground to apprehend a depreciation of both metals, and a consequent general and permanent rise of money prices. But not so with gold. The extraordinary additions lately made to that metal by the Russian mines, and yet more by those of California, and which are still greatly on the increase, must necessarily depreciate that metal. The quantity drawn from all those mines during the present year will, judging from the amount already received, be not less than 60 millions, which is nearly five times as much as was produced by the American mines at the period of their greatest productiveness. It is nearly 4 per cent. on the supposed amount of gold in Europe and America; while the annual increase of gold from the American mines, during the period of depreciation, never exceeded 3 per cent. Great as is the amount now yielded, it may in a year or two be more than doubled.

The probable effects of this enormous increase are—

1. An alteration between the price of gold and silver. From 16 for 1, as is now the proportion, gold may fall to what it was in many countries before the discovery of America, to 10 for 1, or yet lower, before the natural checks of a decreased production and increased consumption restore the equilibrium.

2. In those countries in which gold continues to be a legal tender, the depreciation will injure creditors and benefit debtors in contracts of a long duration. And this result can be prevented only by making silver a legal tender. Experience has shown that gold will not cease to circulate at its market value when it is no longer a legal tender.

3. Those countries in which there is a gold currency must lose in proportion to the amount of such currency and the extent of the depreciation.

4. By the attraction of its gold mines the settlement of California will be rapid beyond all example.

5. Its commerce with China, where labour is as cheap as it is dear in California, and the precious metals are as dear as they are cheap in California, will have the greatest possible encouragement.

6. Gold, in consequence of its mines being chiefly wrought by American citizens, will be cheaper in the United States than in other countries, and it may therefore be made to take the place of small bank notes.

7. The banks, by means of the large deposits of gold received by them, will be enabled to increase their loans and accommodations, which is but too likely to lead to a distention of the currency, and a wild spirit of speculation. If this evil is avoided,

8. The gradual enlargement of the circulation will have its usual effect of giving a spring to useful enterprise and productive industry.

Prof. Frazer announced, as an interesting geological and mineralogical fact, the discovery of gold in the vicinity of Bloomington, Indiana. He read a letter from the Rev. Prof. T. A. Wylie, giving an account of the gold-washings, and of the region in which the gold occurs. The specimens exhibited by Prof. Frazer were gold in association with particles of magnetic oxide of iron, titanite and garnet.

The Clerk read the proceedings of the Board of Officers and Council at their meeting on the 10th inst.

Pending nominations were read.